UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,936	02/14/2001	Vivian E. Mack Strong	19603/4071(CRF-D-2598A)	1665

7590 08/02/2005

Michael L. Goldman, Esq.
NIXON PEABODY LLP
Clinton Square
P.O. Box 31051
Rochester, NY 14603

EXAMINER	
KRASS, FREDERICK F	

ART UNIT	PAPER NUMBER
1614	

DATE MAILED: 08/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 09/782,936	**Applicant(s)** MACK STRONG ET AL.	
	Examiner Frederick F. Krass	**Art Unit** 1614	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 June 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires *4* months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): 35 U.S.C. 112, first paragraph.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *1 and 15*.
   Claim(s) withdrawn from consideration: *24-27*.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☒ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See attachment.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☒ Other: Form 892.

Frederick Krass
Primary Examiner
Art Unit 1614

Attachment to Advisory Action Dated 8-1-05

The examiner has fully considered the arguments presented by Applicant, but they are deemed non-persuasive.

Applicant states:

> It is the position of the U.S. Patent and Trademark Office ("PTO") that it would have been obvious to one or ordinary skill in the pharmaceutical field that if a drug can be used to treat a disease, as in Shoup, it is likewise equally useful for prophylaxis of subjects at risk to suffer from that disease, as described in Spiegelman.

The examiner agrees.

Applicant continues:

> Applicants respectfully disagree and submit that the opposite is, indeed, often true.
>
> High doses of antibiotics are commonly used to treat and cure Lyme disease. However, it is not generally a sound medical practice to administer high doses of antibiotics prophylactically before one is even diagnosed with the disease. Chemotherapy is often used to treat cancer. However, it would be medically unsound to use chemotherapy prophylactically before cancer has even been detected.

The examiner does not agree.

No factual support is seen for these assertions. To the contrary, antibiotics are administered before one is diagnosed with Lyme disease: see USP 6,051,382, cited in response to Applicant's arguments. And, regarding chemotherapy, Spiegelman et al would seem to contradict Applicant's position on its face.

Applicant continues:

> In the outstanding office action, the PTO has acknowledged that Shoup does not teach using a selective COX-2 inhibitor prophylactically on patients at risk for systemic inflammatory response. Combining Spiegelman with Shoup does not remedy this deficiency. Spiegleman teaches the use of PPAR-y agonists for prevention and treatment of abberant cell growth. In certain medical situations, like abberant cell growth, prophylactic and treatment methods may employ the same drugs or medications. However, the PTO has not pointed to any similarities between the PPAR-y agonists of

> Spiegelman and the COX-2 inhibitors Shoup, nor any similarities between the conditions they treat, which would suggest the application of Shoup's methods to prophylaxis.

The examiner does not agree.

The obviousness rejection made by the examiner is based on sound scientific reasoning, namely that treatment generally suggests prophylaxis (as outlined in the first quoted paragraph supra). Thus, the primary reference alone is sufficient to support a finding of obviousness; the examiner cited the secondary reference only to generally illustrate the scientific reasoning used. Under these circumstances, it is not necessary that the examiner establish a 1:1 correspondence with the secondary reference, since the rejection is not predicated on the particulars of the secondary reference.

Additionally, the examiner cites USP 6,025,353 in response to Applicant's arguments. This prior art also supports the factual validity of the general proposition that treatment suggests prophylaxis, and is specific to selective COX-2 inhibitors as well. See, for example, col. 2, lines 13-46 and col. 29, lines 44-62.

Applicant more specifically argues, however, that application of the general scientific principle relied upon by the examiner does not apply to the particular treatments recited instantly:

> Indeed, the disparate cytokine profiles present in injured animals and injured animals with sepsis would teach away from applying Shoup's treatment prophylactically.
>
> When trauma and/or infection occurs, a body's response includes the up-regulation of Th2-type cytokines and down regulation Th1-type cytokines, both indicators of systemic inflammatory responses. See Mack et al, "Candida Infection Following Severe Trauma Exacerbates Th2 Ctyokines and Increases Mortality", *J. Surg. Res.* 69:399-407 (1977) (Attached hereto as Exhibit A)("Mack"). Employing a mouse model of injury followed by *Candida albican* (CA) sepsis challenge, which induces a systemic inflammatory response, Mack showed a significant increase of Th2 cytokines (IL-4 and IL-6) in these mice over the amount of Th2 cytokines in mice with injury alone (Mack, pg. 402, Figure 2). In view of the different cytokine profiles between mice with injury alone and with injury and infection, one of ordinary skill in the art would not have regarded a regime for the treatment of patients that have been injured and infected as being useful in preventing sepsis where only injury has occurred.

This reasoning has been considered but is not found persuasive.

The instant claims recite the prophylaxis of a patient "at risk for systemic inflammatory response syndrome and complications thereof", who has "sustained at least one of trauma, burn injury, life threatening blood loss from penetrating injury, or a patient who has undergone surgery."

A patient undergoing burn injury or surgery, while "at risk" for systemic inflammatory response syndrome, does not necessarily suffer from a trauma or infection. Thus, and purely arguendo, even if Applicant's argument concerning different cytokine profiles is correct, it does not negate the prima facie rejection of the claimed method, since it does not apply to patients merely suffering non-traumatic burns, or who have undergone minor or routine surgery.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick F. Krass whose telephone number is 571-272-0580. The examiner's schedule is as follows:

Monday: 10:30AM- 7PM;
Tuesday: 10:30AM - 7PM;
Wednesday: off;
Thursday: 10:30AM- 7PM; and
Friday: 10:30AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached at 571-272-0951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frederick Krass
Primary Examiner
Art Unit 1614